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IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
TETSURO MOTOYAMA ET AL. : EXAMINER: ZIA, SYED
SERIAL NO: 09/440,692 :
FILED: NOVEMBER 16, 1999 : GROUP ART UNIT: 2131
FOR: REMOTE SYSTEM USAGE :
MONITORING WITH FLEXIBLE
ENCODING AND DECODING OBJECTS

APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

In response to the Office Action of December 15, 2004, appellant requests reinstatement of the Appeal for the present application, and appellant thereby appeals the rejection in the Office Action of December 15, 2004.

I. REAL PARTY IN INTEREST

The present application is assigned to Ricoh Company, Ltd., having a place of business at 3-6 Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan, and that party is the real party in interest in the present appeal.

II. RELATED APPEALS AND INTERFERENCES

Appellant, appellants' legal representatives, and the assignee are not aware of any other appeals, interferences, or judicial proceedings that would directly effect or be directly affected or having a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1, 3-9, 11-17, 19-25, and 27-32 are pending in this application, and each of claims 1, 3-9, 11-17, 19-25, and 27-32 is on appeal. Claims 2, 10, 18 and 26 were canceled during prosecution.

IV. STATUS OF AMENDMENTS

Filed concurrently with the present Appeal Brief is a response to the Office Action of December 15, 2004, submitting a Terminal Disclaimer over U.S. application serial No. 09/440,692 to obviate the outstanding double patenting rejection in the Office Action. No amendments were submitted in that response.

V. SUMMARY OF THE INVENTION

The claimed invention is directed to a system, a method, and a computer program product that all operate to monitor usage of an interface of a target application, the interface including a plurality of operations to be selected by a user, and that then send a message with a log file of monitored usage data to a destination.

More particularly, in the claimed invention, and with reference to Figures 9-11 in the present specification as a non-limiting example, a device 300 includes a user interface 510. Figures 10 and 11 show specific embodiments of user interfaces 600, 700, the embodiment of

Figure 10 showing a monitor 600 of a workstation as a user interface and the embodiment of Figure 11 showing an operation panel 700 of an image forming device as a user interface.

(See also the present specification at page 18, line 11, to page 19, line 24.)

Further, in the claimed invention a monitoring is executed to monitor data of selecting of the plurality of operations of the interface by the user, and to encode and store the monitored data into a log file in the device. (See for example the monitoring block 1200 in Figures 12A, 12B, which includes an encoding operation 1610 and a logging operation 1315, and the corresponding discussion in the present specification at page 20, line 6 et seq.)

Further, a communicating device receives the log file of the monitored data, decodes the stored encoded log file, creates a message of the monitored data, and communicates the message of the monitored data. (See for example the sending block 1600 in Figures 12A, 12B and also Figure 17 in the present specification.)

Further, the monitoring device includes a control to automatically start the monitoring without an input from a device to which the message of the monitored data is to be communicated. (See for example the present specification at page 21, line 19 et seq., and particularly lines 19-20 that state that Figure 13 shows that when a target application starts up a startMonitoring function is called. As evident from that discussion in the present specification and from Figure 13 no input from a device to which the message of the monitored data is to be communicated is needed to begin the monitoring operation.)

Further, the communicating device includes a control to automatically communicate the message of the monitored data by a unidirectional communication without requiring input from the device to which the message of the monitored data is to be communicated. (That subject matter is evident from Figure 17 in the present specification showing the operation of the sending block 1600 and the corresponding description thereof in the present specification at page 27, line 21 et seq. At that portion it is clear that the message of the monitored data is

sent without requiring an input from the device to which the message of the monitor data is to be communicated.)

VI. ISSUES

The first issue outstanding in the above-identified application is whether each feature recited in claims 1, 5-9, 13-17, 21-25, and 31-32 is fully met by the combination of teachings in U.S. patent 6,003,070 to Frantz and further in view of U.S. patent 6,008,717 to Reed et al. (herein "Reed").

The second issue outstanding in the above-identified application is whether each feature recited in claims 3-4, 11-12, 19-20, and 27-28 is fully met by the combination of teachings in Frantz in view of U.S. patent 5,819,110 to Motoyama.

VII. ARGUMENT

As noted above, the first issue pending in this Appeal is whether each element positively recited in claims 1, 5-9, 13-17, 21-25, and 31-32 is fully met by the combination of teachings in Frantz in view of Reed. Applicants respectfully submit each of the claims positively recites features neither taught nor suggested by Frantz in view of Reed.

Independent Claims 1, 9, 17, 25

The above-noted claims positively recite several features neither taught nor suggested by Frantz in view of Reed.

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent therefrom, requires "a device comprising an interface, the interface comprising a plurality of operations to be selected by a user".

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent therefrom, also requires either a monitoring device or a monitoring operation to “monitor data of selecting of the plurality of operations of the interface by the user”.

Such features positively recited in the claims set forth an operation and structure that clearly differ from the teachings in Frantz in view of Reed.

The claims as currently written are directed to a system, method, or computer program product that include a device comprising an interface with a plurality of operations to be selected by a user. The user's selection of those pluralities of operations is monitored, encoded, and stored into a log file. A communicating device receives the log file of the monitored data, decodes the stored encoded log file, creates a message of the monitored data, and communicates that message of the monitored data by a unidirectional communication without requiring input from a device to which the message of the monitored data is communicated.

Frantz, the primary cited reference in the new rejection, is not even similar to the claimed features. The outstanding rejection appears to cite the teachings in Frantz as Frantz utilizes an element with the same term “interface” as in the claimed features. However, the interface and the monitoring operation performed in Frantz differ completely from the claimed features.

As shown in Figure 1 Frantz discloses an interface device 10 that is placed between equipment 20, an ASCII terminal 18, and a line printer 19. That interface 10 in Frantz is a hardware interface and is in particular a smart internet interface for telephone switching equipment status reporting and control.¹ Frantz discloses that standard telephone switching equipment such as a private branch exchange (PBX) or an automatic call distributor (ACD) typically are equipped with two standard interfaces, one standard line printer interface, which

¹ Frantz at column 1, lines 5-7.

can log error conditions and changes in status in configuration, and a second standard interface on most equipment is an ASCII dumb terminal interface to drive a VT 100 style dumb terminal that a technician can use to query an error buffer and also to make changes in the configuration of the system to take on line or off line certain functionalities in the switch.² Frantz recognizes that a problem with such standard equipment is that all the checking and testing must be done locally.³

To address the above-noted drawback recognized by Frantz, Frantz discloses an intelligent interface that the Office Action of December 15, 2004 recognizes as able to communicate by e-mail messages.

However, Frantz differs fundamentally from the claimed features.

The claims are directed to a device in which an interface includes “a plurality of operations to be selected by a user”. A non-limiting example of such an interface may be an operation panel of an image forming device including several operations that can be selected by a user, operations such as “Print”, “Copy”, etc.

The interface 10 shown in Figure 1 in Frantz is not directed to such a type of interface. More particularly, that interface 10 does not have any operations selected by a user that are monitored.

In the claimed invention the user’s selecting of the plurality of operations on the interface is monitored, e.g. it is monitored if a user presses a “Print” button on an interface of an image forming device interface in such a non-limiting example, and that monitored data of the user’s selection of the operations on the interface is communicated.

The outstanding rejection does appear to make a reference to “activation criteria” in Frantz as corresponding to such operations that are monitored.⁴ However, in that respect Frantz merely appears to indicate that activation criteria can indicate when information is to

² Frantz at column 1, lines 9-20.

³ Frantz column 1, lines 21-22.

⁴ Office Action of December 15, 2004, page 5, lines 4-6 of prenumbered paragraph 6.

be communicated, and the “activation criteria” are not in fact user’s selection of operations on the interface. More particularly, Frantz notes that

...the activation criteria can be set to an alert mode, wherein only emergency system messages, such as critical error messages would be sent. The activation criteria can be set to a maintenance/repair mode where every system message, including interrupts, register contents, memory mapping, memory contents, software descriptions, configuration settings, error log contents, and any other data useful information about the status of the equipment that would be used by a technician in repairing, updating, monitoring, or performing routine maintenance on the equipment is sent via E-mail.⁵

The claims clearly require different operations as in Frantz. In the claimed invention the user’s actual selections of operations on the interface are monitored. That is simply not the case in Frantz. Frantz does not disclose any even similar operation.

Thereby, Frantz does not disclose or suggest the claimed “interface” and “monitoring device” positively recited in the claims.

Moreover, no teachings in Reed are cited with respect to the above-noted feature or can overcome the above-noted deficiencies in Frantz.

Thereby, each of the pending claims distinguishes over Frantz in view of Reed and the outstanding rejection based on Frantz in view of Reed must be reversed.

The Dependent Claims

Moreover, the dependent claims recite further features neither taught nor suggested by Frantz in view of Reed in contrast to the positions stated in the December 15, 2004 Office Action.

⁵ Frantz at column 5, lines 3-13.

Dependent Claims 3, 4, 11, 12, 19, 20, 27, 28

Dependent claims 3, 11, 19, and 27 further recite that the “target application is an image forming device and the interface is an operation panel of the image forming device”. Dependent claims 4, 12, 20, and 28 further recite that “the device is an appliance and the interface is an operation panel of the apparatus”. No combination of teachings of Frantz in view of Motoyama address the above-noted features.

First, with respect to the further rejection based on Frantz in view of Motoyama, the statement for the rejection is not understood as it does not even cite the teachings in Reed. Reed was cited with respect to, for example, independent claim 1, from which claims 3 and 4 depend, but is somehow not cited in the rejection to the further above-noted dependent claims. In that respect applicants submit the rejection is improper as it does not even overcome the recognized deficiencies in Frantz with respect to the rejections of the independent claims.

Moreover, the rejection to the above-noted claims relies upon Frantz to disclose the interface applicable to a home-type appliance, Frantz and to also disclose the apparatus as directed to a photocopier that monitors the amount of toner paper or printer.⁶

In that respect applicants submit that reliance on the teaching of Frantz at column 2, lines 15-31 is misguided. At column 2, lines 5-31 Frantz provides examples of interface devices that also perform monitoring operations of the devices themselves. For example, Frantz discloses a photocopier that monitors the amount of toner and paper. In no respect does Frantz teach or suggest that the interface device monitors actual selections on the interface device by a user. In Frantz the noted photocopier only monitors the amount of toner and paper but does not at all monitor the user’s selections of the graphical user interface of the photocopier, as an example. Thus, the reliance on the teachings in Frantz at column 2,

⁶ Office Action of December 15, 2004, page 7, lines 4-7 of prenumbered paragraph 9.

lines 15-31 is misguided with respect to the claimed features set forth in the above-noted claims.

Also in that respect no teachings in Motoyama would be over the deficiencies in Frantz as Frantz is not directed to a device that monitors how a user is utilizing a device.

Dependent Claims 5, 13, 21, 29

Dependent claims 5, 13, 21, and 29 further recite “the communicating device sends the log of the monitored data when the user exits the target application”. That feature also distinguishes over Frantz in view of Reed.

The above-noted features is believed to clearly distinguish over Frantz, which is relied upon to teach that feature at column 4, lines 32-52.⁷

The Office Action cites Frantz at column 4, lines 32-52 to disclose sending the log of the monitored data when the user exits the device. That basis for the outstanding rejection is not understood as Frantz does not disclose or suggest any such features. As noted above, the claims are directed to a system that monitors how a user selects operations on an interface, and thus when the user exits the interface the log of the monitored data is communicated. Frantz is not directed to a device that monitors how a user selects operations on an interface, and thus Frantz cannot teach or suggest sending such log data when the user exits the device. In Frantz the user is not exiting the device at all.

Dependent Claims 6, 14, 22, 30

Dependent claims 6, 14, 22, and 30 further recite “a setting unit configured to set a number of sessions of the target application to be executed by the user prior to the communicating device communicating the log file of the monitored data”.

⁷ Office Action of December 15, 2004, page 8, lines 4-5.

With respect to the above-noted feature the Office Action cites item 25 in Frantz and the disclosure at column 4, line 56 to column 5, line 12.⁸ However, that reliance on the teachings in Frantz is not at all understood. Frantz does not disclose or suggest any indication in which a number of sessions can be set of the target application being used by the user prior to communicating the device. None of the noted “activation criteria” in Frantz is directed to such a feature. Thus, the above-noted claims even further distinguish over the applied art.

Dependent Claims 7, 15, 23, 31

Dependent claims 7, 15, 23, and 31 further recite the “monitoring device encodes the monitored data into the log file and the communicating device decodes the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms”.

The above-noted rejection does not even address the above-noted features in the noted claims, and thus clearly the Office Action has not even attempted to set forth a *prima facie* case of obviousness with respect to the above-noted features. Thus, the above-noted claims even further distinguish over the applied art.

⁸ Office Action of December 15, 2004, page 8, lines 6-8.

IX. CONCLUSION

For the foregoing reasons each of claims 1, 3-9, 11-17, 19-25, and 27-32 distinguishes over the teachings in Frantz in view of Reed, and further in view of Motoyama, and thereby the outstanding rejections must be REVERSED.

Respectfully submitted,

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CLAIMS APPENDIX

1. A system comprising:

a device comprising an interface, the interface comprising a plurality of operations to be selected by a user;

a monitoring device configured to monitor data of selecting of the plurality of operations of the interface by the user, and to encode and store the monitored data into a log file in the device;

a communicating device configured to receive the log file of the monitored data, to decode the stored encoded log file, to create a message of the monitored data, and to then communicate the message of the monitored data;

wherein the monitoring device includes a control to automatically start the monitoring without an input from a device to which the message of the monitored data is to be communicated, and

wherein the communicating device includes a control to automatically communicate the message of the monitored data by a unidirectional communication without requiring input from the device to which the message of the monitored data is to be communicated.

2. (Canceled).

3. A system according to Claim 1, wherein the device is an image forming device and the interface is an operation panel of the image forming device.

4. A system according to Claim 1, wherein the device is an appliance and the interface is an operation panel of the appliance.

5. A system according to Claim 1, wherein the communicating device sends the log of the monitored data when the user exits the device.

6. A system according to Claim 1, further comprising a setting unit configured to set a number of sessions of the device to be executed by the user prior to the communicating device communicating the log file of the monitored data.

7. A system according to Claim 1, wherein the monitoring device encodes the monitored data into the log file and the communicating device decodes the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

8. A system according to any one of Claims 1-7, wherein the communicating device communicates the log of the monitored data by Internet mail.

9. A system comprising:

a device comprising interface means, the interface means for providing a plurality of operations to be selected by a user;

monitoring means for monitoring data of selecting of the plurality of operations of the interface means by the user, and for encoding and storing the monitored data into a log file in the device;

communicating means for receiving the log file of the monitored data, for decoding the stored encoded log file, for creating a message of the monitored data, and for communicating the message of the monitored data;

wherein the monitoring means includes a control to automatically start the monitoring without an input from a device to which the message of the monitored data is to be communicated, and

wherein the communicating means includes a control to automatically communicate the message of the monitored data by a unidirectional communication without requiring input from the device to which the message of the monitored data is to be communicated.

10. (Canceled).

11. A system according to Claim 9, wherein the device is an image forming device and the interface means is an operation panel of the image forming device.

12. A system according to Claim 9, wherein the device is an appliance and the interface means is an operation panel of the appliance.

13. A system according to Claim 9, wherein the communicating means sends the log of the monitored data when the user exits the device.

14. A system according to Claim 9, further comprising a setting means for setting a number of sessions of the device to be executed by the user prior to the communicating means communicating the log of the monitored data.

15. A system according to Claim 9, wherein the monitoring means encodes the monitored data into the log file and the communicating means decodes the monitored data

from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

16. A system according to any one of Claims 9-15, wherein the communicating means communicates the log of the monitored data by Internet mail.

17. A method of monitoring usage of an interface of a device, the interface including a plurality of operations to be selected by a user, comprising the steps of:

monitoring data of selecting the plurality of operations of the interface selected by the user;

generating a log file of the monitored data by encoding the monitored data and storing the encoded monitored data into the log file in the device; and

creating a message of the monitored data by reading the encoded monitored data from the log file and decoding the encoded monitored data, and communicating the message of the monitored data;

wherein the monitoring includes a control operation to automatically start the monitoring without an input from a device to which the message of the monitored data is to be communicated, and

wherein the communicating includes a control operation to automatically communicate the message of the monitored data by a unidirectional communication without requiring input from the device to which the message of the monitored data is to be communicated.

18. (Canceled).

19. A method according to Claim 17, wherein the device is an image forming device and the interface is an operation panel of the image forming device.

20. A method according to Claim 17, wherein the device is an appliance and the interface is an operation panel of the appliance.

21. A method according to Claim 17, wherein the communicating step sends the log of the monitored data when the user exits the device.

22. A method according to Claim 17, further comprising a step of setting a number of sessions of the device to be executed by the user prior to the communicating device communicating the log of the monitored data.

23. A system according to Claim 17, wherein the encoding step encodes the monitored data into the log file and the decoding step decodes the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

24. A method according to any one of Claims 17-23, wherein the communicating step communicates the log of the monitored data by Internet mail.

25. A computer program product comprising:
a computer storage medium and a computer program code mechanism embedded in the computer storage medium for causing a computer to monitor a user's usage of an interface

of a device, the interface comprising a plurality of operations to be selected by a user, comprising:

a first computer code device configured to monitor data of selecting of the plurality of operations of the interface by the user, and to encode and store the monitored data into a log file in the device;

a second computer code device configured to receive the log file of the monitored data, to decode the stored encoded log file, to create a message of the monitored data, and to then communicate the message of the monitored data;

wherein the first computer code device includes a control code to automatically start the monitoring without an input from a device to which the message of the monitored data is to be communicated, and

wherein the second computer code device includes a control code to automatically communicate the message of the monitored data by a unidirectional communication without requiring input from the device to which the message of the monitored data is to be communicated.

26. (Canceled).

27. A computer program product according to Claim 25, wherein the device is an image forming device and the interface is an operation panel of the image forming device.

28. A computer program product according to Claim 25, wherein the device is an appliance and the interface is an operation panel of the appliance.

29. A computer program product according to Claim 25, wherein the second computer code device is further configured to send the log of the monitored data when the user exits the device.

30. A computer program product according to Claim 25, further comprising a third computer code device configured to set a number of sessions of the device to be executed by the user prior to the second computer code device communicating the log of the monitored data.

31. A computer program product according to Claim 25, wherein the second computer code device encodes the monitored data into the log file and decodes the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

32. A computer program product according to any one of Claims 25-31, wherein the second computer code device is further configured to communicate the log of the monitored data by Internet mail.

EVIDENCE APPENDIX

None.

RELATED APPEALS APPENDIX

None.